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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,435	02/20/2004	Cuong Minh Le	SJO920030043US1	6378
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KONRAD RAYNES & VICTOR, LLP. ATTN: IBM37 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			EXAMINER JONES, PRENELL P	
			ART UNIT 2616	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/783,435

Applicant(s)

LE ET AL.

Examiner

Prenell P. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 16-20, 36-40 and 44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 21-35 and 41-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/20/04.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date: July 3, 2007.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-15, 21-35 and 41- 43, drawn to a packets, classified in class 709, subclass 223, 224, 204, 251, 230, 246 and 220; class 714, subclass 222-225, 256, 231 and 354.
 - II. Claims 16-20, 36-40 and 44, drawn to a communication system communicating packets, classified in class 370, subclass 254, 410 and 451.

2. The inventions are distinct, each from the other because of the following reasons:

Group I (claims 1-15, 21-35 and 41-43) claims performing configuration checking of a network, whereas Group II (claims 16-20, 36-40 and 44) claims correcting a configuration problems in a network.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

3. During a telephone conversation with Applicants Representative Ms. Janaki Davda a provisional election was made without traverse to prosecute the invention of Group I, claims 1-15, 21-35 and 41-43. Affirmation of this election must be made by Applicant in replying to this Office action. Claims 16-20, 36-40 and 44 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claims 16-20, 36-40 and 44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention, there being no allowable generic or linking claim. Election was made without traverse on July 3, 2007 with respect to claims 1-15, 21-35 and 41-43.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to ***a single paragraph on a separate sheet*** within the range of ***50 to 150 words***. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

2. Claims 21-32, 41 and 42 are objected to because of the following informalities:
3. The term "**capable**" in claims 21 thru 42 makes the limitations following it to be optional, which renders the means and bounds of the claim to be indefinite. Appropriate correction is required.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-15,21-35 and 41-43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 1-15,21-35 and 41-43, Although the claims themselves are represented as statutory, Applicant discloses and defines on page 16 of the specification that the ***"article of manufacture in which the code is implemented may comprise a transmission media, signals propagating through space, radio waves, infrared signals,"*** which appears to be directed toward a signal, and is therefore non-statutory.

See MPEP

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-14, 21-34, 41 and 42, rejected under 35 U.S.C. 103(a) as being unpatentable over Alon et al (US PG PUB 2005/0262233 in view of Nori et al (US PG PUB 2005/0049993).

Regarding claim 1, 21 and 41, Alon discloses detection and analyzing events as associated in a storage area network (SAN), whereby servers and associated applications (article manufacture along with program logic) wherein detection of events in a network, checking/validating conformance of configurations/configuration policies as associated with events (Abstract, paragraphs 0013, 0014, 0027), events representative of a function/transaction are generated (paragraph 0017, 0020), detection of violations are determined via an Event correlation engine which establishes relationships between events, and event sequences, and a Validation analysis engine compares path policies, thereby identifying violations (paragraph 0035, 0080, 0081, 0082, 0084, 0085). However, Alon is silent on scanning a network data store for at least one transaction.

In a storage platform communication system, Nori discloses a computer system wherein when scanning the data store for changes; event detection relies on a log or trace left by update operations (paragraph 0523)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement scanning the data store with respect to

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events/transactions as taught by Nori with the teachings of Alon for the purpose of further monitoring and analyzing configuration changes as they are associated with events.

Regarding claim 2 and 22, Alon further discloses a trigger event, as it is associated with re-defining physical/logical connections or configuration policy (paragraph 0084).

Regarding claims 6 and 26, Alon further discloses a request made with respect to checking for violations associated with existing configuration policies (paragraph 0035, 0040, 0056, 0059, 0063, 0068).

Regarding claim 7 and 27, Alon further discloses a management server with running software/coding recording every time-stamped event and storing it, thereby further providing time-stamped event that violated access policy (paragraph 0077-0082).

Regarding claim 8 and 28, Alon further discloses logging events and performing graphical analysis representing network procedures (paragraph 0081 and 0083).

Regarding claim 9, 10, 29 and 30 Alon further a management server recording every time-stamped event and storing it, thereby further providing time-stamped event that violated access policy (paragraph 0077-0082), with respect to policy violations a knowledge base representing pre-defined network procedures/solution that can provide helpful hints and suggestions to users where no single final determination about the best corrective action can be derived (paragraph 0081).

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Regarding claim 11 and 31, Alon further discloses the determining of whether configuration policy has been violated further includes component differences, along with performance and availability (paragraph 0038-0040, 0070-0084)

Regarding claim 3 and 23, as indicated above, combined Alon and Nori discloses detection and analyzing events as associated in a storage area network (SAN), whereby servers and associated applications (article manufacture along with program logic) wherein detection of events in a network, checking/validating conformance of configurations/configuration policies as associated with events, detection of violations are determined via an Event correlation engine which establishes relationships between events, and event sequences, and a Validation analysis engine compares path policies, thereby identifying violations and scanning a network data store for a transaction.

Although Alon is silent on a configuration policy being retrieved from a local policy data store, Nori further discloses utilizing remote and local data store (storage platform) wherein data/policy access so that the talking is performed to the local data store (paragraph 0688, 0955).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement accessing data/policies from a local data store as taught by Nori with the teachings of Alon for the purpose of further monitoring, analyzing and managing configuration policy changes as they are associated with events easier via an administrator (paragraph 0984).

Regarding claim 4 and 24, as indicated above, combined Alon and Nori discloses detection and analyzing events as associated in a storage area network (SAN), whereby

servers and associated applications (article manufacture along with program logic) wherein detection of events in a network, checking/validating conformance of configurations/configuration policies as associated with events, detection of violations are determined via an Event correlation engine which establishes relationships between events, and event sequences, and a Validation analysis engine compares path policies, thereby identifying violations and scanning a network data store for a transaction.

Although Alon is silent on local policy data store is automatically/proactive updated with a configuration policy in a remote data store, Nori further discloses utilizing remote and local data store (storage platform) wherein the local data store retrieves changes from a remote data store/storage platform automatically, and data in data store is dynamic (paragraph 0647, 0658, 0698, 0982).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement local policy data store is automatically updated with a configuration policy in a remote data store as taught by Nori with the teachings of Alon for the purpose of further monitoring, analyzing and managing configuration policy changes as to minimize latency.

Regarding claim 5 and 25, as indicated above, combined Alon and Nori discloses detection and analyzing events as associated in a storage area network (SAN), whereby servers and associated applications (article manufacture along with program logic) wherein detection of events in a network, checking/validating conformance of configurations/configuration policies as associated with events, detection of violations are determined via an Event correlation engine which establishes relationships between events, and

event sequences, and a Validation analysis engine compares path policies, thereby identifying violations and scanning a network data store for a transaction.

Although Alon is silent on receiving a hypothetical network scenario, and populating data store with configuration data, and rolling back transactions, Nori further discloses constraint data/configuration data used to populate data store (paragraph 0967), and a community folder representing a hypothetical shared folder, which is a hypothetical scenario (paragraph 0565, 0566), and returning changes (roll back) associated with an application/service/relationship/items/transaction change (paragraph 0644, 0647, 0649, 0864, 0890, 0893, 0940, 0941).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to receive a hypothetical network scenario, and populating data store with configuration data as taught by Nori with the teachings of Alon for the purpose of further monitoring and analyzing configuration changes as they are associated with events and detecting policy/constraint/configuration violations.

Regarding claim 12, 14, 32 and 34, as indicated above, combined Alon and Nori discloses detection and analyzing events as associated in a storage area network (SAN), whereby servers and associated applications (article manufacture along with program logic) wherein detection of events in a network, checking/validating conformance of configurations/configuration policies as associated with events, detection of violations are determined via an Event correlation engine which establishes relationships between events, and event sequences, and a Validation analysis engine compares path policies, thereby identifying violations and scanning a network data store for a transaction. Alon further discloses event

mapping which is pre-defined and is represented by the performance of associated operations (paragraph 0068, 0081 and 0082).

Although Alon is silent on receiving a hypothetical network scenario, and populating data store with configuration data, Nori further discloses constraint data/configuration data used to populate data store (paragraph 0967), and a community folder representing a hypothetical shared folder, which is a hypothetical scenario (paragraph 0565, 0566).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to receive a hypothetical network scenario, and populating data store with configuration data as taught by Nori with the teachings of Alon for the purpose of further monitoring and analyzing configuration changes as they are associated with events and detecting policy/constraint/configuration violations.

Regarding claim 13 and 33, as indicated above, combined Alon and Nori discloses detection and analyzing events as associated in a storage area network (SAN), whereby servers and associated applications (article manufacture along with program logic) wherein detection of events in a network, checking/validating conformance of configurations/configuration policies as associated with events, detection of violations are determined via an Event correlation engine which establishes relationships between events, and event sequences, and a Validation analysis engine compares path policies, thereby identifying violations and scanning a network data store for a transaction.

Although Alon is silent on rolling back transaction by removing configuration data from data store, Nori further discloses returning changes (roll back) associated with an application/service/relationship/items/transaction change (paragraph 0644, 0647, 0649, 0864, 0890, 0893, 0940, 0941).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement returning changes (roll back) associated with an application/service/relationship/items/transaction change (paragraph 0644, 0647, 0649, 0864, 0890, 0893, 0940, 0941) as taught by Nori with the teachings of Alon for the purpose of further monitoring and analyzing configuration changes as they are associated with events and detecting policy/constraint/configuration violations, as well as minimizing data store crowding.

7. Claim 15, 35 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alon et al (US PG PUB 2005/0262233 in view of Nori et al (US PG PUB 2005/0049993 as applied to claims 14 and 34 above, and further in view of Beadles et al (US 2007/0022124).

Regarding claim 15, 35 and 42, as indicated above, combined Alon and Nori discloses detection and analyzing events as associated in a storage area network (SAN), whereby servers and associated applications (article manufacture along with program logic) wherein detection of events in a network, checking/validating conformance of configurations/configuration policies as associated with events, detection of violations are determined via an Event correlation engine which establishes relationships between events, and event sequences, and a Validation analysis engine compares path policies, thereby identifying violations and scanning a network data store for a transaction. Alon further discloses event mapping which is pre-defined and is represented by the performance of associated operations, constraint data/configuration data used to populate data store, and a community folder representing a hypothetical shared folder, which is a hypothetical scenario.

Although Alon and Nori are silent on automatically correcting violations, in a storage policy network management system, Beadles discloses managing policies associated with

configurations, wherein configurations are automatically/proactive checked to insure it conforms to the policies, and depending on the violation the base configuration checker corrects the violation (paragraph 0093).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement automatically correcting violations, in a storage policy network management system as taught by Beadles with the combined teachings of Alon and Nor for the purpose of further monitoring and analyzing configuration changes as they are associated with events and detecting policy/constraint/configuration violations.

8. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alon et al (US PG PUB 2005/0262233 in view of Nori et al (US PG PUB 2005/0049993 as applied to claims 14 and 34 above, and further in view of DiFalco et al (US 2005/0278191).

Regarding claim 43, as indicated above, combined Alon and Nori discloses detection and analyzing events as associated in a storage area network (SAN), whereby servers and associated applications (article manufacture along with program logic) wherein detection of events in a network, checking/validating conformance of configurations/configuration policies as associated with events, detection of violations are determined via an Event correlation engine which establishes relationships between events, and event sequences, and a Validation analysis engine compares path policies, thereby identifying violations and scanning a network data store for a transaction. Alon further discloses event mapping which is pre-defined and is represented by the performance of associated operations, constraint data/configuration data used to populate data store, and a community folder representing a hypothetical shared folder, which is a hypothetical scenario.

Although Alon and Nori are silent on reactive configuration checking, DiFalco discloses managing policies associated with configurations, wherein the architecture facilitates reactive detection/checking of changes in operation with respect to system guidelines/policies.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement reactive configuration checking as taught by DiFalco with the combined teachings of Alon and Nor for the purpose of redundancy and further monitoring and analyzing configuration changes as they are associated with events and detecting policy/constraint/configuration violations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prenell P. Jones whose telephone number is 571-272-3180.

The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones
July 9, 2007


WING CHAN 7/9/07
SUPERVISORY PATENT EXAMINER